

Report No.:

Test Time: 2022/8/29 15:37

## Luminaire Property

Luminaire Manufacturer:

Luminaire Category: PNR230ASBK

Luminous Length (mm): 600

Luminous Height (mm): 22

Current: 0.484 A

Power Factor: 1.000

Luminaire Description: PNR230ASBK

Luminous Width (mm): 35

Voltage: 24.0 V

Power: 11.60 W

## Photometric Results

CIE Class: Direct

Measurement Flux: 1130.8 lm

Downward Ratio: 99%

Horizontal Diffuse Angle(10%,50%): H132.9,H57.1

Vertical Diffuse Angle(10%,50%): V142.7,V72.6

Luminaire Efficacy Rating (LER): 97

Max. Intensity: 885.8 cd

Total Rated Lamp Lumens: 1130.8 lm

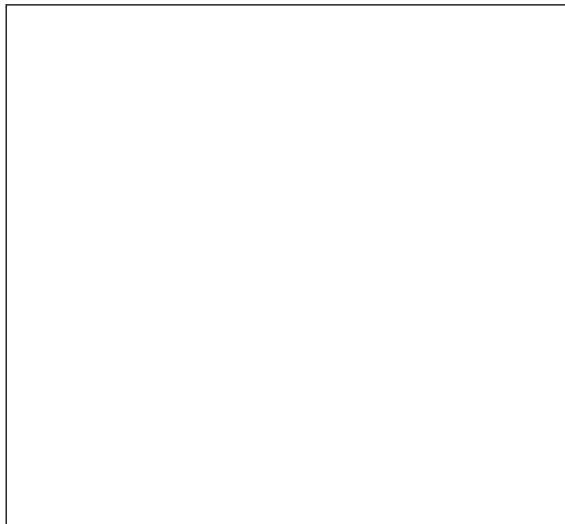
Efficiency: 100%

Upward Ratio: 1%

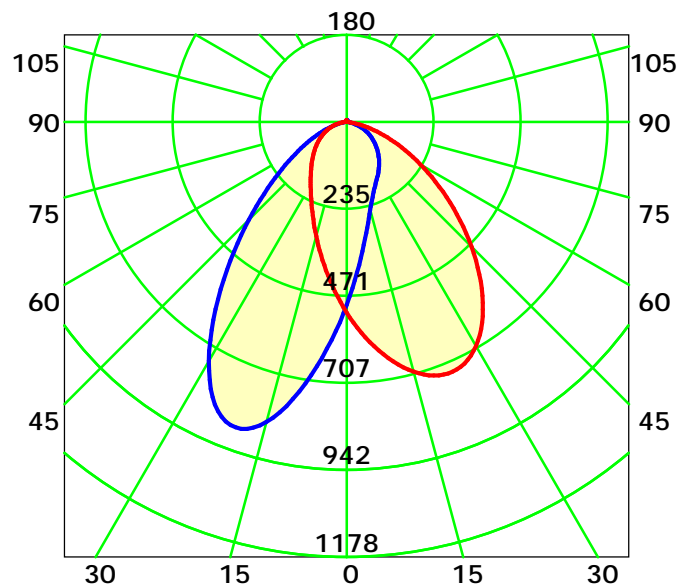
Central Intensity: 495.26 cd

Pos of Max. Intensity: H150 V16

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 64.9° Unit: cd

— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator: Jacky

Gamma Plane (°):0.0-180.0: 1.0

Test Device: GPM-1800B

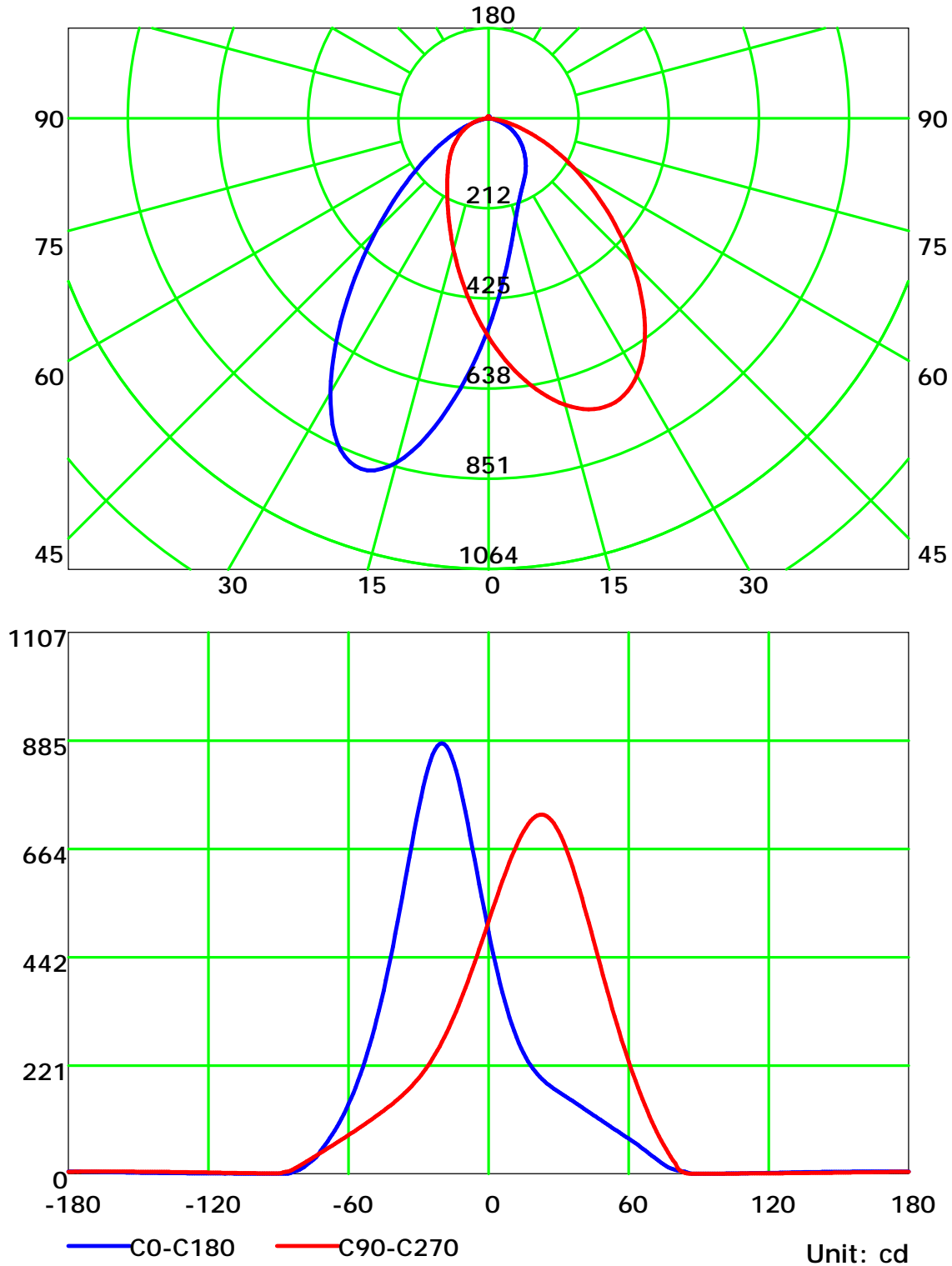
Distance: 9.028 m

Humidity: 60%

Inspector:



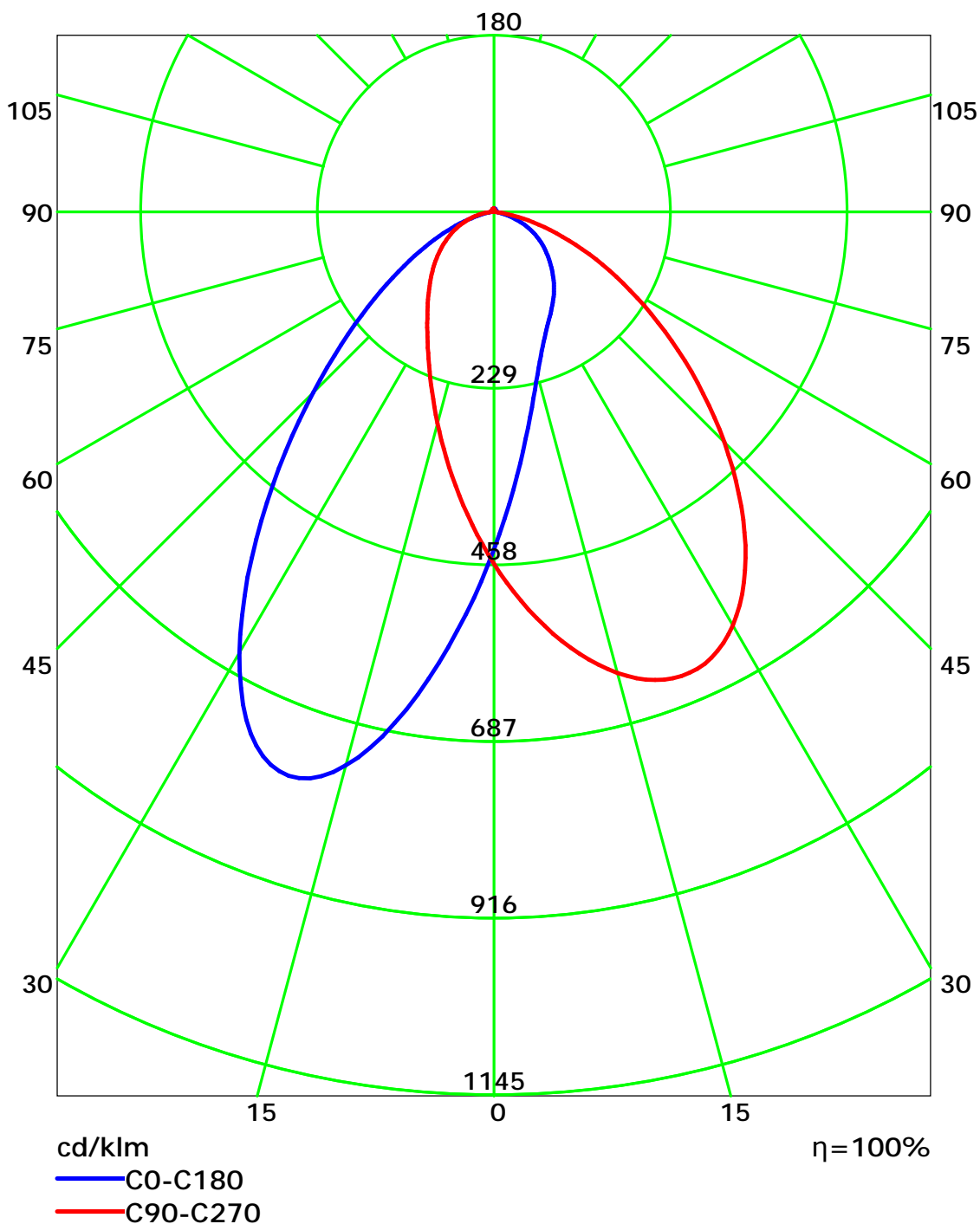
## Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 30.0  
Test Lab:  
Test Type: TYPE C  
Temperature: 25  
Operator: Jacky

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 9.028 m  
Humidity: 60%  
Inspector:

## Luminous Intensity Distribution Curve(cd/klm)



C Plane (°):0.0-360.0: 30.0  
Test Lab:  
Test Type: TYPE C  
Temperature: 25  
Operator: Jacky

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 9.028 m  
Humidity: 60%  
Inspector:

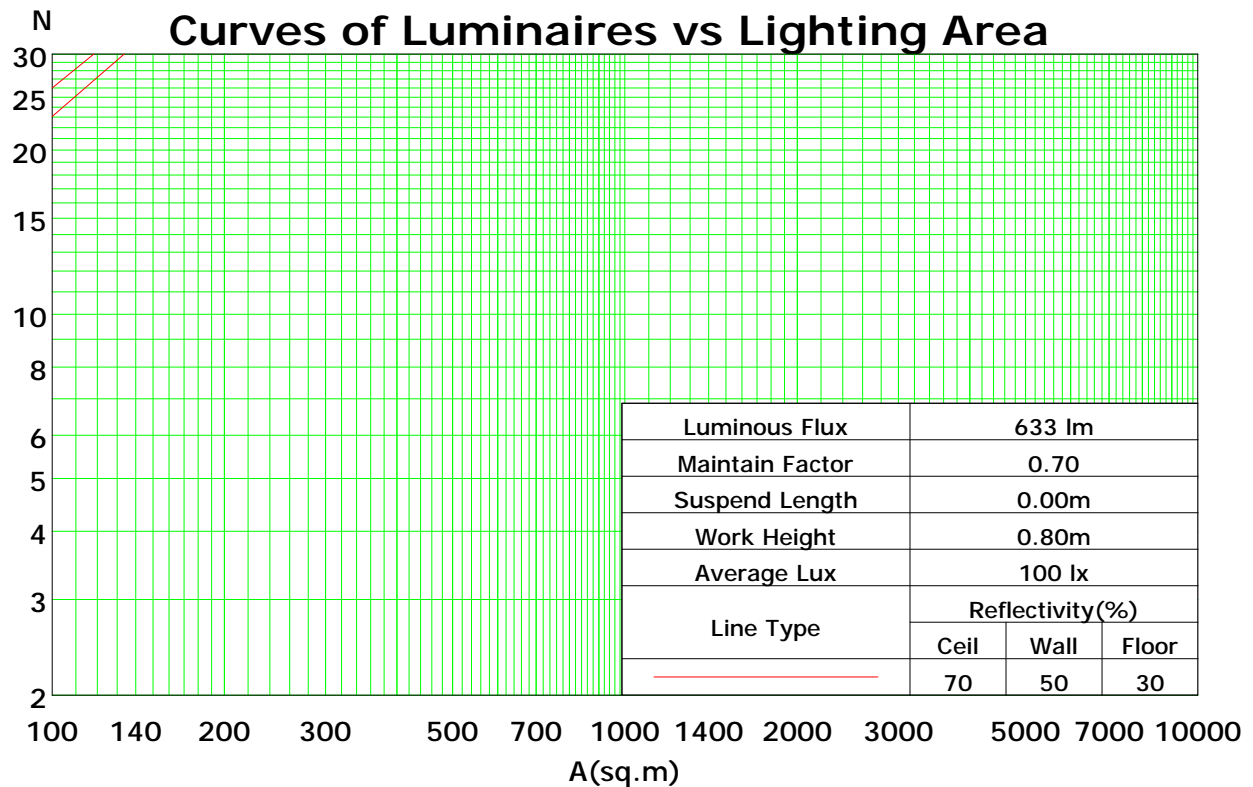
## Coefficients Of Utilization - Zonal Cavity Method

RC	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.5	0.5	0.5	0.3	0.3	0.3	0.1	0.1	0.1	0
RW	0.7	0.5	0.3	0.1	0.7	0.5	0.3	0.1	0.5	0.3	0.1	0.5	0.3	0.1	0.5	0.3	0.1	0
RCR	RF = 0.2																	
0	119	119	119	119	116	116	116	116	110	110	110	105	105	105	101	101	101	99
1	110	106	103	99	107	104	101	98	99	97	94	95	93	91	92	90	88	86
2	102	95	89	84	99	93	87	83	89	84	81	86	82	79	82	79	77	75
3	94	84	77	72	91	83	76	71	80	74	69	77	72	68	74	70	67	65
4	87	76	68	62	84	75	67	62	72	66	61	70	64	60	67	63	59	57
5	80	69	60	54	78	67	60	54	65	59	53	63	57	53	61	56	52	50
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	56	51	47	45
7	69	57	49	43	68	56	49	43	55	48	43	53	47	42	52	46	42	40
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36
9	61	48	41	35	59	48	40	35	47	40	35	45	39	35	44	39	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30

Spacing Criteria (0-180): 1.29

Spacing Criteria (90-270): 1.27

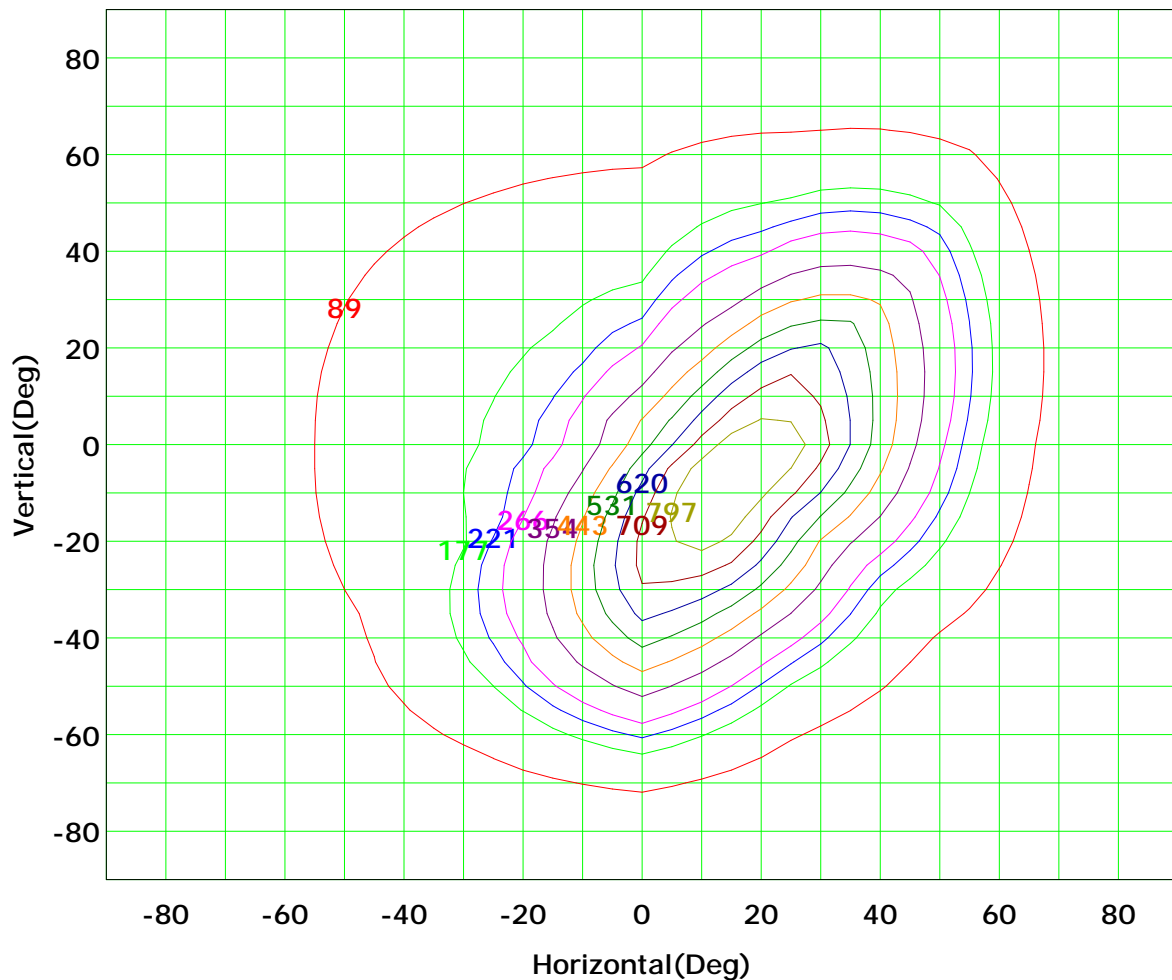
Spacing Criteria (Diagonal): 1.22



C Plane (°):0.0-360.0: 30.0  
Test Lab:  
Test Type: TYPE C  
Temperature: 25  
Operator: Jacky

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 9.028 m  
Humidity: 60%  
Inspector:

## Isocandela (rectangle)



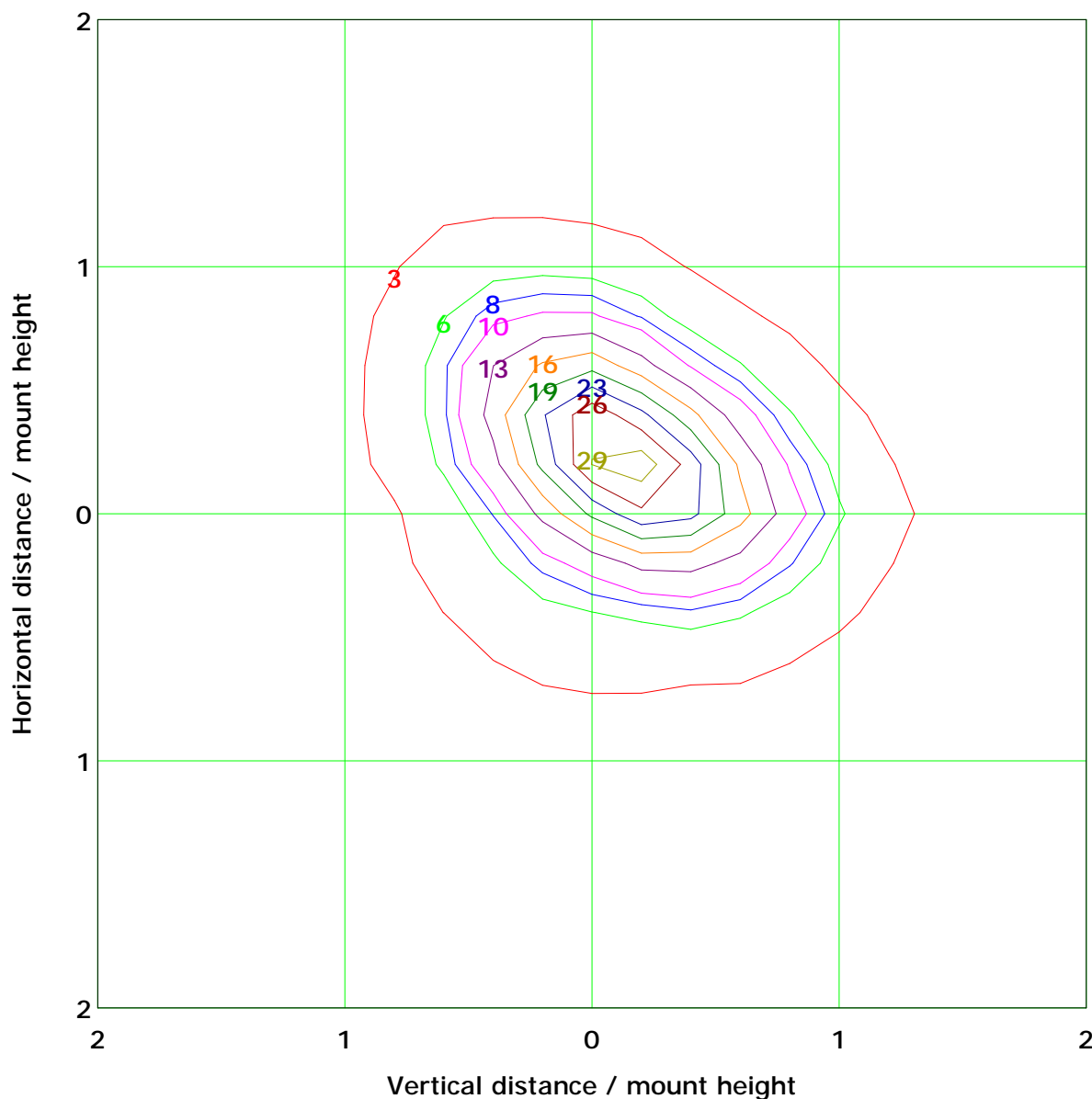
I<sub>max</sub> (100%): 886 cd

( 10%): 89 cd	( 20%): 177 cd
( 25%): 221 cd	( 30%): 266 cd
( 40%): 354 cd	( 50%): 443 cd
( 60%): 531 cd	( 70%): 620 cd
( 80%): 709 cd	( 90%): 797 cd

C Plane (°):0.0-360.0: 30.0  
Test Lab:  
Test Type: TYPE C  
Temperature: 25  
Operator: Jacky

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 9.028 m  
Humidity: 60%  
Inspector:

## IsoLux Plot



Mounting Height: 5.0m    Max Lux(100%): 32.2 lx	
( 10%): 3.2 lx	( 20%): 6.4 lx
( 25%): 8.1 lx	( 30%): 9.7 lx
( 40%): 12.9 lx	( 50%): 16.1 lx
( 60%): 19.3 lx	( 70%): 22.5 lx
( 80%): 25.8 lx	( 90%): 29.0 lx

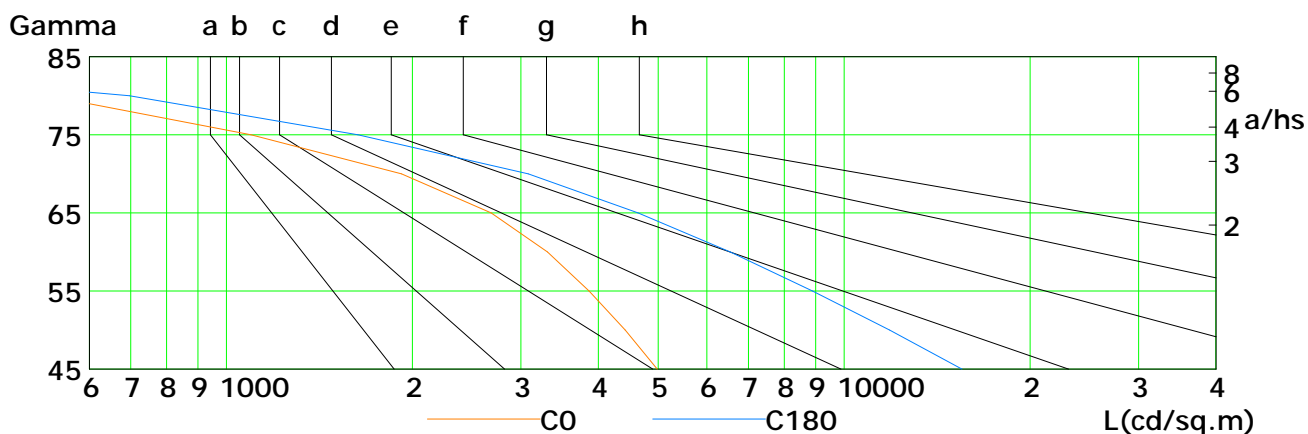
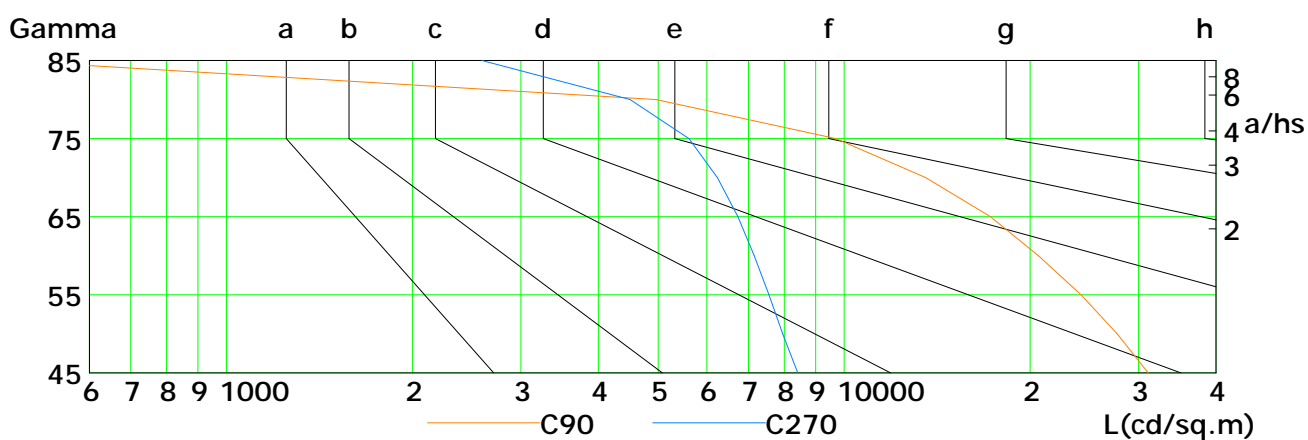
C Plane (°):0.0-360.0: 30.0  
Test Lab:  
Test Type: TYPE C  
Temperature: 25  
Operator: Jacky

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 9.028 m  
Humidity: 60%  
Inspector:

## Lum Limit Curve

Dazzle	Quality	Illuminance (lx)							
1.15	A	2000	1000	500	<=300				
1.50	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.20	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300

a b c d e f g h

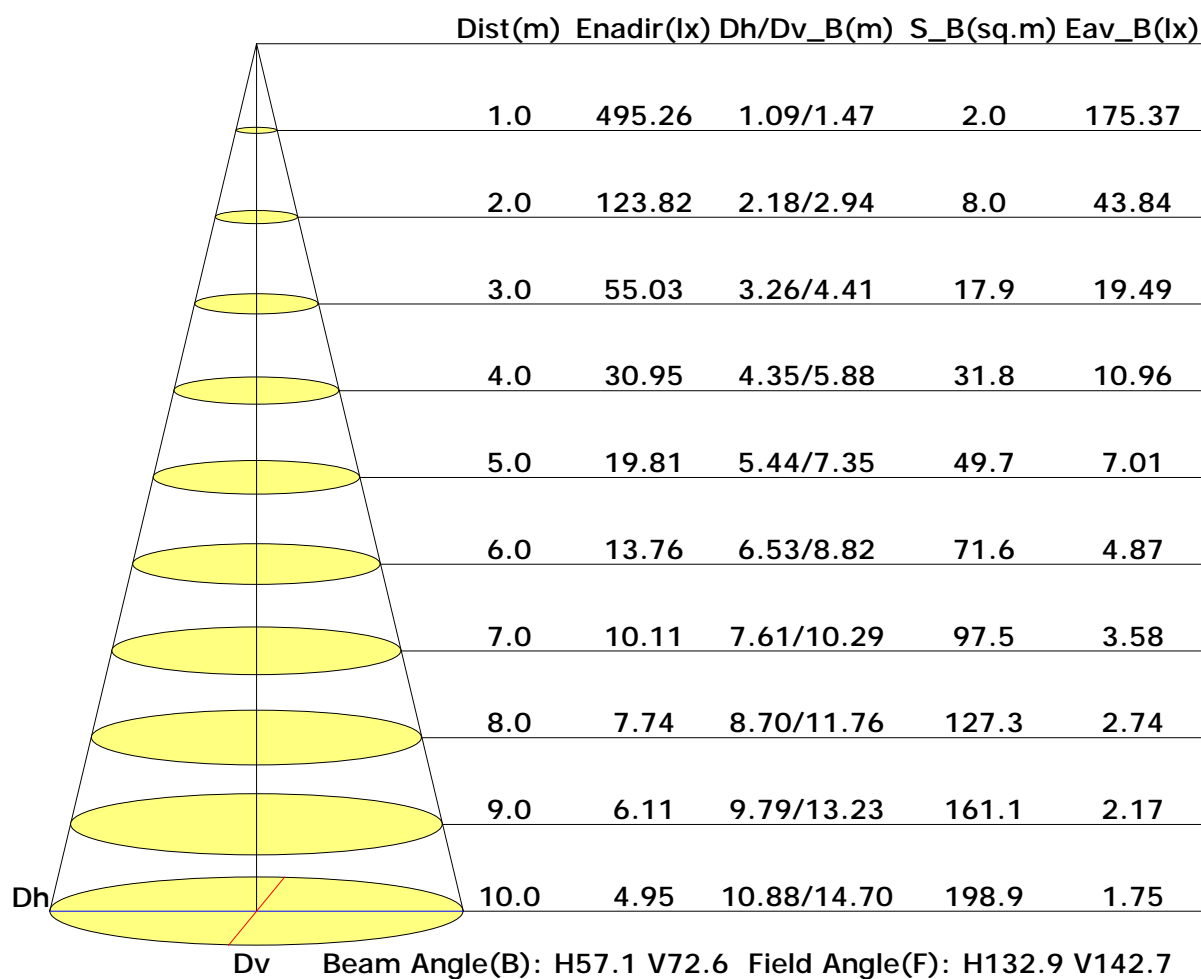


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	4984	4423	3868	3311	2682	1921	1097	514	220
C90	31089	27682	24202	20651	17264	13564	9694	4960	439
C180	15514	11846	8890	6543	4642	3083	1633	697	143
C270	8416	7960	7555	7155	6736	6237	5608	4504	2591

C Plane (°):0.0-360.0: 30.0  
Test Lab:  
Test Type: TYPE C  
Temperature: 25  
Operator: Jacky

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 9.028 m  
Humidity: 60%  
Inspector:

## Illuminance at a Distance

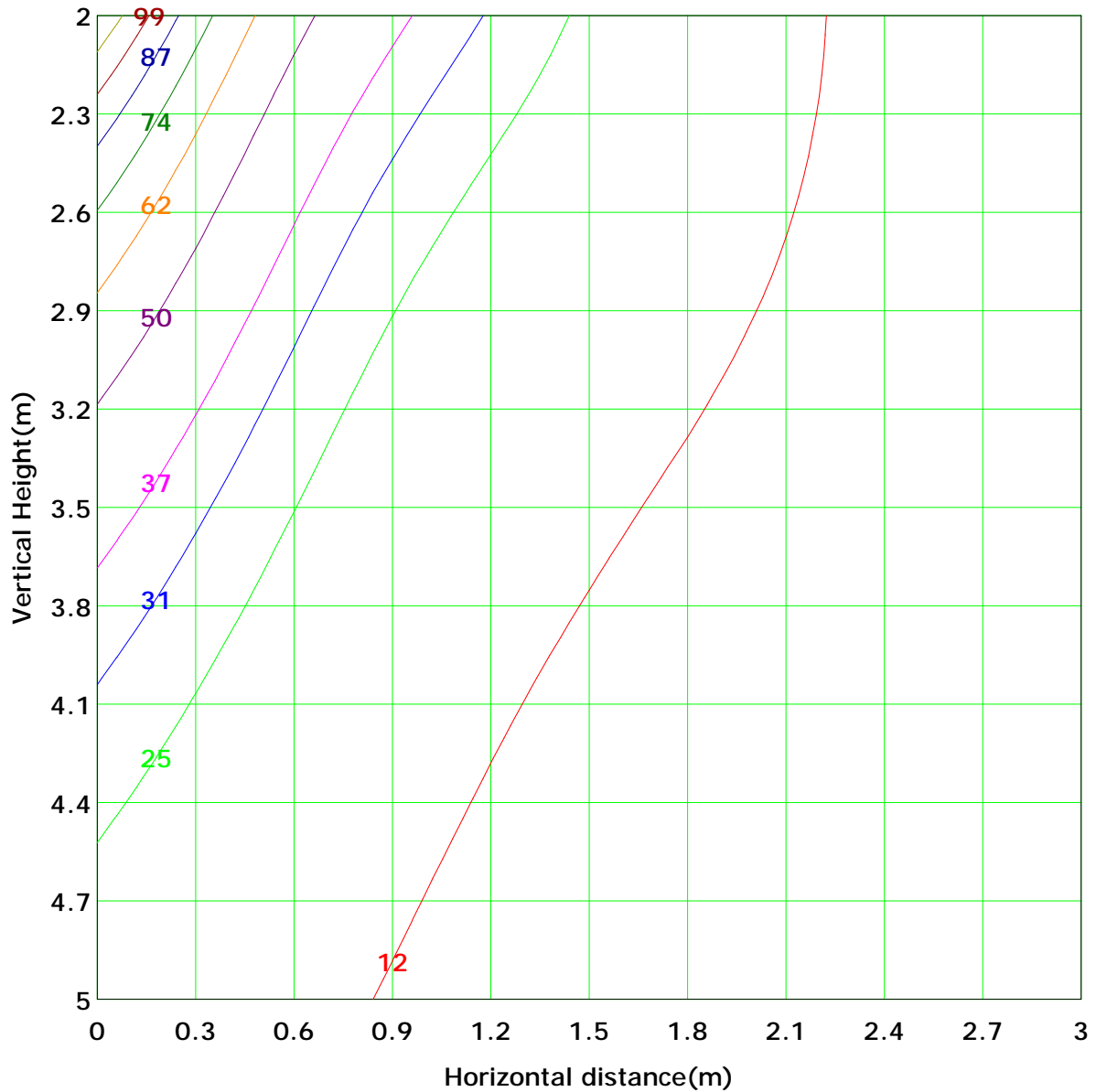


C Plane (°):0.0-360.0: 30.0  
Test Lab:  
Test Type: TYPE C  
Temperature: 25  
Operator: Jacky

Gamma Plane (°):0.0-180.0: 1.0  
Test Device: GPM-1800B  
Distance: 9.028 m  
Humidity: 60%  
Inspector:



## Vertical IsoLux Plot



Lowest(m): 2.0m	Highest(m): 5.0m	Max Lux: 123.8 lx
( 10%): 12.4 lx	( 20%): 24.8 lx	
( 25%): 31.0 lx	( 30%): 37.1 lx	
( 40%): 49.5 lx	( 50%): 61.9 lx	
( 60%): 74.3 lx	( 70%): 86.7 lx	
( 80%): 99.1 lx	( 90%): 111.4 lx	

C Plane (°):0.0-360.0: 30.0  
Test Lab:  
Test Type: TYPE C  
Temperature: 25  
Operator: Jacky

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 9.028 m  
Humidity: 60%  
Inspector:

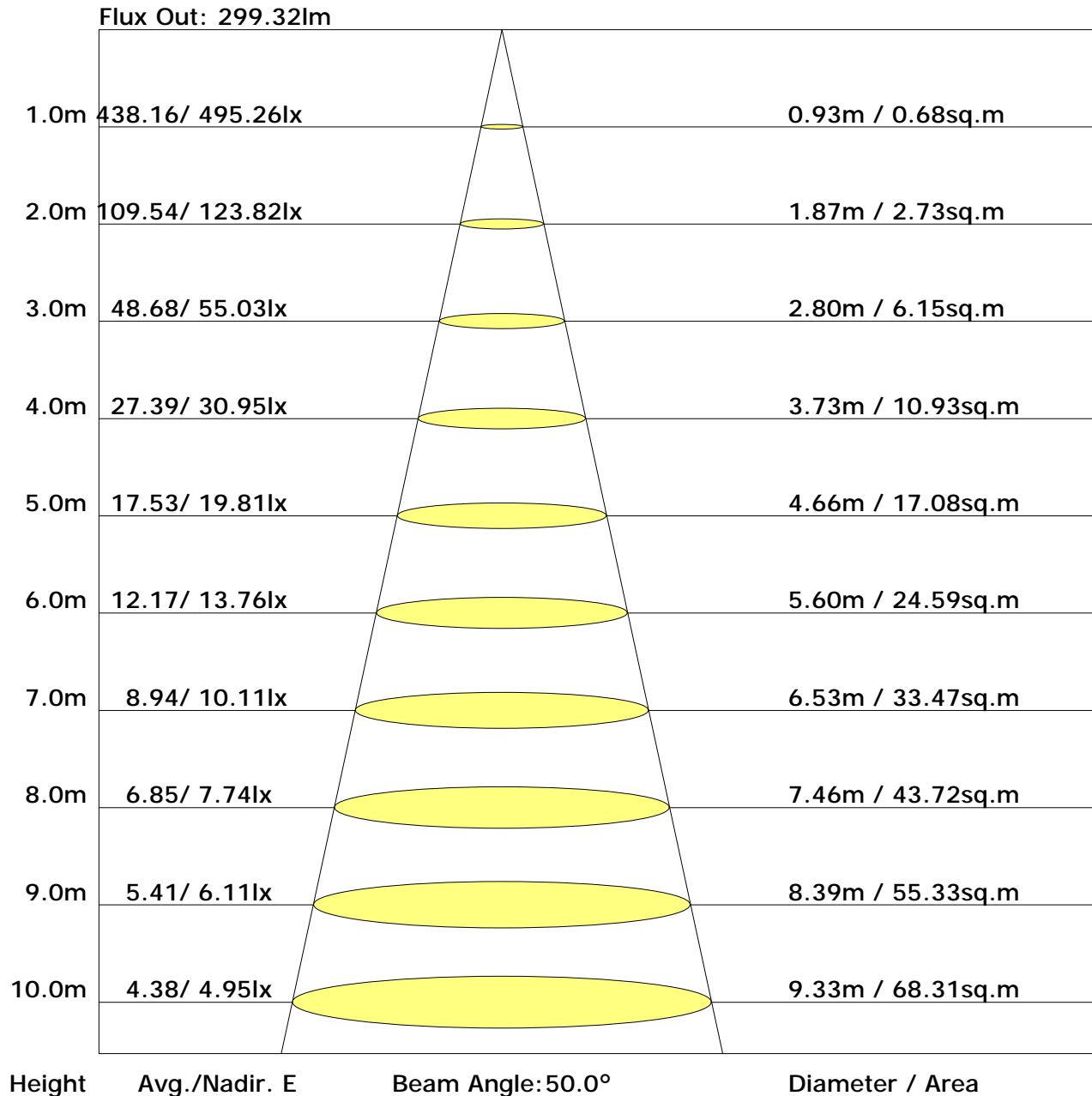
## Area Flux Table

Unit: lm

		Vertical plane																				
		-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90	Flux(T)	Flux(E)
		0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.5	1.1	2.7	0.1	0.0
		0.0	0.0	0.2	0.5	0.8	1.0	1.1	1.2	1.1	1.0	0.8	0.6	0.5	0.4	0.3	0.2	0.1	0.0	0.0	2.7	0.0
		0.0	0.1	0.5	1.2	1.8	2.3	2.4	2.4	2.2	1.9	1.7	1.5	1.3	1.1	0.9	0.7	0.5	0.3	0.1	12.5	0.0
		0.0	0.2	0.8	2.1	3.3	4.0	4.1	4.0	3.4	2.9	2.6	2.2	1.9	1.6	1.4	1.1	0.8	0.5	0.2	33.8	0.0
		0.0	0.2	1.1	2.9	5.0	6.4	6.4	5.9	4.7	3.9	3.5	2.9	2.2	1.7	1.4	1.0	0.7	0.4	0.1	68.2	0.0
		0.0	0.3	1.3	3.5	7.0	9.5	9.8	8.3	6.5	5.0	4.3	3.6	2.8	2.0	1.6	1.2	0.8	0.5	0.2	107.9	0.0
		0.0	0.3	1.4	3.9	8.2	13.0	14.3	11.9	8.9	6.4	5.1	4.2	3.2	2.3	1.6	1.2	0.8	0.5	0.2	149.5	0.0
		0.0	0.3	1.5	4.1	8.7	14.8	18.8	16.8	12.2	8.4	6.0	4.7	3.6	2.5	1.9	1.4	1.0	0.7	0.4	172.7	0.0
		0.0	0.3	1.4	3.9	8.5	15.4	21.6	21.8	16.4	11.1	7.0	5.0	3.8	2.6	1.9	1.4	1.0	0.7	0.4	165.0	0.0
		0.0	0.3	1.2	3.4	7.6	14.3	21.7	25.2	21.7	13.8	8.3	5.5	3.9	2.6	1.6	1.2	0.8	0.5	0.2	134.2	0.0
		0.0	0.2	1.1	2.9	6.0	10.9	17.6	24.3	24.0	17.0	10.1	5.8	3.8	2.5	1.5	1.0	0.7	0.4	0.1	92.3	0.0
		0.0	0.2	0.8	2.2	4.3	7.7	13.7	20.2	22.5	18.3	11.2	6.7	3.8	2.3	1.4	1.0	0.6	0.4	0.1	63.1	0.0
		0.0	0.1	0.6	1.5	2.9	5.6	9.8	14.7	18.4	16.6	10.8	6.7	3.9	2.1	1.2	0.8	0.5	0.2	0.0	27.6	0.0
		0.0	0.1	0.4	0.9	2.0	3.8	6.3	9.9	13.2	12.8	9.0	5.7	3.4	1.9	1.0	0.7	0.4	0.2	0.0	15.9	0.0
		0.0	0.1	0.2	0.5	1.1	2.2	3.7	6.1	8.4	8.4	6.3	4.1	2.6	1.5	0.8	0.5	0.3	0.1	0.0	9.4	0.0
		0.0	0.0	0.1	0.2	0.5	1.0	1.9	3.2	4.5	4.6	3.6	2.5	1.6	0.9	0.5	0.2	0.1	0.0	0.0	25.4	0.0
		0.0	0.0	0.0	0.1	0.2	0.3	0.6	1.1	1.6	1.7	1.4	1.0	0.7	0.4	0.2	0.1	0.0	0.0	0.0	9.4	0.6
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	1.0	0.0
		0.1	2.7	12.5	33.8	68.2	112.5	154.1	177.3	170.0	134.2	92.3	63.1	42.9	27.6	15.9	7.1	1.7	0.2	1116		
		0.0	0.0	6.5	29.6	63.7	107.9	149.5	172.7	165.0	128.7	86.5	56.9	36.1	19.2	3.7	0.0	0.0	0.0	0.0		1026
		-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90	Flux(T)	Flux(E)
Horizontal plane																						



## The Average Illuminance Effective Figure



C Plane (°):0.0-360.0: 30.0  
Test Lab:  
Test Type: TYPE C  
Temperature: 25  
Operator: Jacky

Gamma Plane (°):0.0-180.0: 1.0  
Test Device: GPM-1800B  
Distance: 9.028 m  
Humidity: 60%  
Inspector:

## UGR Table

Reflectance:										
Ceiling (cavity)	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
X=2H Y=2H	14.9	16.4	15.3	16.7	17.0	19.6	21.0	19.9	21.3	21.7
3H	16.3	17.6	16.7	17.9	18.3	20.6	21.9	21.0	22.2	22.6
4H	16.6	17.8	17.0	18.2	18.6	20.8	22.0	21.2	22.4	22.8
6H	16.7	17.8	17.1	18.2	18.6	20.9	22.0	21.3	22.4	22.8
8H	16.7	17.8	17.2	18.2	18.6	20.8	21.9	21.3	22.3	22.7
12H	16.7	17.7	17.2	18.1	18.6	20.8	21.8	21.2	22.2	22.7
X=4H Y=2H	15.5	16.7	15.9	17.1	17.5	19.6	20.8	20.0	21.2	21.6
3H	16.9	17.9	17.3	18.3	18.8	20.7	21.7	21.1	22.1	22.5
4H	17.3	18.2	17.7	18.6	19.1	21.0	21.8	21.4	22.3	22.8
6H	17.4	18.2	17.9	18.7	19.2	21.0	21.8	21.5	22.3	22.8
8H	17.4	18.2	17.9	18.6	19.1	21.0	21.7	21.5	22.2	22.7
12H	17.5	18.1	18.0	18.6	19.1	21.0	21.6	21.5	22.1	22.6
X=8H Y=4H	17.4	18.1	17.9	18.6	19.1	20.9	21.6	21.4	22.1	22.6
6H	17.6	18.2	18.1	18.7	19.2	21.0	21.6	21.5	22.1	22.6
8H	17.6	18.1	18.1	18.7	19.2	21.0	21.5	21.5	22.0	22.5
12H	17.6	18.1	18.2	18.6	19.2	20.9	21.4	21.5	21.9	22.5
X=12H Y=4H	17.4	18.0	17.9	18.5	19.0	20.9	21.5	21.4	22.0	22.5
6H	17.6	18.1	18.1	18.6	19.1	21.0	21.5	21.5	22.0	22.5
8H	17.6	18.1	18.1	18.6	19.2	20.9	21.4	21.5	21.9	22.5

Calculate in accordance with CIE 190:2010

C Plane (°):0.0-360.0: 30.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature: 25  
 Operator: Jacky

Gamma Plane (°):0.0-180.0: 1.0  
 Test Device: GPM-1800B  
 Distance: 9.028 m  
 Humidity: 60%  
 Inspector:

## Utilisation Factor Table(Floor cavity)

Utilisation Factors UF(F)			SHR NOM = 1.25								
Room Reflectance			Room Index(RI)								
Ceiling	Wall	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
0.70	0.50	0.20	0.65	0.75	0.82	0.86	0.93	0.97	1.00	1.03	1.06
	0.30		0.59	0.68	0.75	0.80	0.87	0.92	0.96	1.00	1.03
	0.20		0.54	0.64	0.71	0.76	0.83	0.88	0.92	0.97	1.00
0.50	0.50	0.20	0.64	0.73	0.79	0.83	0.89	0.93	0.96	0.99	1.01
	0.30		0.58	0.67	0.74	0.79	0.85	0.89	0.93	0.97	0.99
	0.20		0.53	0.63	0.70	0.74	0.81	0.86	0.90	0.94	0.97
0.30	0.50	0.20	0.62	0.71	0.77	0.81	0.86	0.90	0.92	0.96	0.97
	0.30		0.57	0.66	0.72	0.77	0.83	0.87	0.90	0.93	0.96
	0.20		0.53	0.62	0.69	0.73	0.80	0.84	0.87	0.91	0.94
0.00	0.00	0.00	0.51	0.60	0.66	0.70	0.76	0.80	0.83	0.87	0.89
Rating: 12W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980											

## Utilisation Factor Table(Wall)

Utilisation Factors UF(W)			SHR NOM = 1.25								
Room Reflectance			Room Index(RI)								
Ceiling	Wall	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
0.70	0.50	0.20	0.86	0.70	0.59	0.51	0.40	0.33	0.28	0.22	0.17
	0.30		0.72	0.60	0.51	0.45	0.36	0.30	0.26	0.20	0.17
	0.20		0.62	0.52	0.45	0.40	0.33	0.28	0.24	0.19	0.16
0.50	0.50	0.20	0.83	0.67	0.56	0.48	0.38	0.35	0.26	0.20	0.16
	0.30		0.70	0.58	0.49	0.43	0.35	0.29	0.25	0.19	0.16
	0.20		0.61	0.51	0.44	0.39	0.32	0.27	0.23	0.18	0.15
0.30	0.50	0.20	0.80	0.64	0.53	0.46	0.36	0.29	0.25	0.19	0.15
	0.30		0.68	0.56	0.48	0.41	0.33	0.27	0.23	0.18	0.15
	0.20		0.60	0.50	0.43	0.38	0.31	0.26	0.22	0.17	0.14
0.00	0.00	0.00	0.48	0.39	0.33	0.29	0.23	0.19	0.16	0.12	0.10
Rating: 12W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980											

## Utilisation Factor Table(Ceiling cavity)

Utilisation Factors UF(C)			SHR NOM = 1.25									
Room Reflectance			Room Index(RI)									
Ceiling	Wall	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00	
0.70	0.50	0.20	0.16	0.18	0.19	0.19	0.20	0.21	0.21	0.22	0.23	
	0.30		0.11	0.12	0.14	0.15	0.16	0.18	0.18	0.20	0.21	
	0.20		0.06	0.08	0.10	0.11	0.13	0.15	0.16	0.17	0.19	
0.50	0.50	0.20	0.16	0.17	0.18	0.19	0.20	0.20	0.21	0.21	0.22	
	0.30		0.10	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.20	
	0.20		0.06	0.08	0.10	0.11	0.13	0.14	0.15	0.17	0.18	
0.30	0.50	0.20	0.15	0.16	0.17	0.18	0.19	0.19	0.20	0.20	0.21	
	0.30		0.10	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	
	0.20		0.06	0.08	0.09	0.11	0.12	0.14	0.15	0.16	0.17	
0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
<p>Rating: 12W Photometrically tested without ceiling board.</p> <p>Multiply UF values by service correction factors</p> <p>Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>												

## Zonal Lumen

Gamma [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	514.8	0.5	0.5	0.04	0.04
1.0-2.0	515.1	1.5	2.0	0.13	0.17
2.0-3.0	515.5	2.5	4.4	0.22	0.39
3.0-4.0	516.3	3.5	7.9	0.31	0.70
4.0-5.0	516.8	4.4	12.3	0.39	1.09
5.0-6.0	517.4	5.4	17.8	0.48	1.57
6.0-7.0	518.5	6.4	24.2	0.57	2.14
7.0-8.0	519.7	7.4	31.7	0.66	2.80
8.0-9.0	521.1	8.4	40.1	0.75	3.55
9.0-10.0	522.3	9.5	49.6	0.84	4.38
10.0-11.0	523.1	10.5	60.0	0.92	5.31
11.0-12.0	523.9	11.5	71.5	1.01	6.32
12.0-13.0	524.3	12.4	83.9	1.10	7.42
13.0-14.0	524.0	13.4	97.3	1.19	8.61
14.0-15.0	523.1	14.4	111.7	1.27	9.88
15.0-16.0	521.7	15.3	127.0	1.35	11.23
16.0-17.0	519.5	16.2	143.2	1.43	12.66
17.0-18.0	516.7	17.0	160.2	1.51	14.17
18.0-19.0	513.1	17.9	178.0	1.58	15.75
19.0-20.0	508.7	18.6	196.7	1.65	17.39
20.0-21.0	503.5	19.3	216.0	1.71	19.10
21.0-22.0	497.4	20.0	236.0	1.77	20.87
22.0-23.0	490.7	20.6	256.6	1.82	22.69
23.0-24.0	483.1	21.1	277.7	1.87	24.56
24.0-25.0	475.0	21.6	299.3	1.91	26.47
25.0-26.0	466.3	22.0	321.3	1.95	28.42
26.0-27.0	457.0	22.4	343.7	1.98	30.39
27.0-28.0	447.1	22.6	366.3	2.00	32.40
28.0-29.0	436.9	22.9	389.2	2.02	34.42
29.0-30.0	426.6	23.0	412.2	2.04	36.46
30.0-31.0	415.8	23.1	435.4	2.05	38.50
31.0-32.0	404.6	23.2	458.6	2.05	40.55
32.0-33.0	393.4	23.2	481.7	2.05	42.60
33.0-34.0	382.0	23.1	504.9	2.04	44.65
34.0-35.0	370.6	23.0	527.9	2.04	46.68
35.0-36.0	359.2	22.9	550.8	2.02	48.71

C Plane (°): 0.0-360.0: 30.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature: 25  
 Operator: Jacky

Gamma Plane (°): 0.0-180.0: 1.0  
 Test Device: GPM-1800B  
 Distance: 9.028 m  
 Humidity: 60%  
 Inspector:



## Zonal Lumen (Continue 1)

Gamma [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
36.0-37.0	347.8	22.7	573.4	2.01	50.71
37.0-38.0	336.3	22.5	595.9	1.99	52.70
38.0-39.0	325.0	22.2	618.1	1.96	54.66
39.0-40.0	313.7	21.9	640.0	1.94	56.59
40.0-41.0	302.5	21.5	661.5	1.91	58.50
41.0-42.0	291.6	21.2	682.7	1.87	60.37
42.0-43.0	280.8	20.8	703.5	1.84	62.21
43.0-44.0	270.1	20.4	723.9	1.80	64.02
44.0-45.0	259.5	19.9	743.8	1.76	65.78
45.0-46.0	249.2	19.5	763.3	1.72	67.50
46.0-47.0	239.0	19.0	782.3	1.68	69.19
47.0-48.0	229.1	18.5	800.8	1.64	70.82
48.0-49.0	219.6	18.0	818.9	1.59	72.42
49.0-50.0	210.0	17.5	836.4	1.55	73.97
50.0-51.0	200.6	17.0	853.4	1.50	75.47
51.0-52.0	191.7	16.4	869.8	1.45	76.92
52.0-53.0	182.9	15.9	885.7	1.41	78.33
53.0-54.0	174.3	15.4	901.1	1.36	79.69
54.0-55.0	166.0	14.8	915.9	1.31	81.00
55.0-56.0	157.9	14.3	930.2	1.26	82.26
56.0-57.0	149.9	13.7	943.9	1.21	83.47
57.0-58.0	142.2	13.1	957.0	1.16	84.64
58.0-59.0	134.6	12.6	969.6	1.11	85.75
59.0-60.0	127.3	12.0	981.7	1.06	86.81
60.0-61.0	120.2	11.5	993.1	1.01	87.83
61.0-62.0	113.3	10.9	1004.0	0.97	88.79
62.0-63.0	106.5	10.4	1014.4	0.92	89.71
63.0-64.0	99.8	9.8	1024.2	0.87	90.57
64.0-65.0	93.4	9.2	1033.4	0.82	91.39
65.0-66.0	87.1	8.7	1042.1	0.77	92.16
66.0-67.0	80.8	8.1	1050.2	0.72	92.88
67.0-68.0	74.7	7.6	1057.8	0.67	93.55
68.0-69.0	68.8	7.0	1064.8	0.62	94.17
69.0-70.0	63.1	6.5	1071.3	0.57	94.74
70.0-71.0	57.6	6.0	1077.3	0.53	95.27
71.0-72.0	52.3	5.4	1082.7	0.48	95.75

C Plane (°): 0.0-360.0: 30.0  
Test Lab:  
Test Type: TYPE C  
Temperature: 25  
Operator: Jacky

Gamma Plane (°): 0.0-180.0: 1.0  
Test Device: GPM-1800B  
Distance: 9.028 m  
Humidity: 60%  
Inspector:

## Zonal Lumen (Continue 2)

Gamma [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
72.0-73.0	47.2	4.9	1087.7	0.44	96.19
73.0-74.0	42.4	4.5	1092.1	0.39	96.58
74.0-75.0	37.7	4.0	1096.1	0.35	96.93
75.0-76.0	33.3	3.5	1099.6	0.31	97.25
76.0-77.0	29.1	3.1	1102.7	0.27	97.52
77.0-78.0	25.1	2.7	1105.4	0.24	97.76
78.0-79.0	21.4	2.3	1107.7	0.20	97.96
79.0-80.0	18.1	1.9	1109.7	0.17	98.13
80.0-81.0	14.9	1.6	1111.3	0.14	98.28
81.0-82.0	11.9	1.3	1112.6	0.11	98.39
82.0-83.0	9.3	1.0	1113.6	0.09	98.48
83.0-84.0	7.1	0.8	1114.3	0.07	98.55
84.0-85.0	5.3	0.6	1114.9	0.05	98.60
85.0-86.0	3.8	0.4	1115.3	0.04	98.64
86.0-87.0	2.7	0.3	1115.6	0.03	98.66
87.0-88.0	1.9	0.2	1115.8	0.02	98.68
88.0-89.0	1.3	0.1	1116.0	0.01	98.69
89.0-90.0	1.0	0.1	1116.1	0.01	98.70
90.0-91.0	0.9	0.1	1116.2	0.01	98.71
91.0-92.0	0.9	0.1	1116.3	0.01	98.72
92.0-93.0	0.9	0.1	1116.4	0.01	98.73
93.0-94.0	0.9	0.1	1116.5	0.01	98.74
94.0-95.0	0.9	0.1	1116.6	0.01	98.75
95.0-96.0	1.0	0.1	1116.7	0.01	98.75
96.0-97.0	1.0	0.1	1116.8	0.01	98.76
97.0-98.0	1.0	0.1	1116.9	0.01	98.77
98.0-99.0	1.1	0.1	1117.0	0.01	98.78
99.0-100.0	1.1	0.1	1117.1	0.01	98.79
100.0-101.0	1.1	0.1	1117.3	0.01	98.81
101.0-102.0	1.2	0.1	1117.4	0.01	98.82
102.0-103.0	1.2	0.1	1117.5	0.01	98.83
103.0-104.0	1.2	0.1	1117.6	0.01	98.84
104.0-105.0	1.3	0.1	1117.8	0.01	98.85
105.0-106.0	1.3	0.1	1117.9	0.01	98.86
106.0-107.0	1.4	0.1	1118.1	0.01	98.88
107.0-108.0	1.4	0.2	1118.2	0.01	98.89

C Plane (°): 0.0-360.0: 30.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature: 25  
 Operator: Jacky

Gamma Plane (°): 0.0-180.0: 1.0  
 Test Device: GPM-1800B  
 Distance: 9.028 m  
 Humidity: 60%  
 Inspector:

## Zonal Lumen (Continue 3)

Gamma [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
108.0-109.0	1.5	0.2	1118.4	0.01	98.90
109.0-110.0	1.5	0.2	1118.5	0.01	98.92
110.0-111.0	1.6	0.2	1118.7	0.01	98.93
111.0-112.0	1.6	0.2	1118.9	0.01	98.95
112.0-113.0	1.7	0.2	1119.0	0.02	98.96
113.0-114.0	1.7	0.2	1119.2	0.02	98.98
114.0-115.0	1.8	0.2	1119.4	0.02	98.99
115.0-116.0	1.8	0.2	1119.6	0.02	99.01
116.0-117.0	1.9	0.2	1119.8	0.02	99.03
117.0-118.0	2.0	0.2	1119.9	0.02	99.04
118.0-119.0	2.0	0.2	1120.1	0.02	99.06
119.0-120.0	2.1	0.2	1120.3	0.02	99.08
120.0-121.0	2.1	0.2	1120.5	0.02	99.10
121.0-122.0	2.2	0.2	1120.7	0.02	99.11
122.0-123.0	2.3	0.2	1121.0	0.02	99.13
123.0-124.0	2.3	0.2	1121.2	0.02	99.15
124.0-125.0	2.4	0.2	1121.4	0.02	99.17
125.0-126.0	2.5	0.2	1121.6	0.02	99.19
126.0-127.0	2.5	0.2	1121.8	0.02	99.21
127.0-128.0	2.6	0.2	1122.1	0.02	99.23
128.0-129.0	2.6	0.2	1122.3	0.02	99.25
129.0-130.0	2.7	0.2	1122.5	0.02	99.27
130.0-131.0	2.8	0.2	1122.7	0.02	99.29
131.0-132.0	2.8	0.2	1123.0	0.02	99.31
132.0-133.0	2.9	0.2	1123.2	0.02	99.33
133.0-134.0	3.0	0.2	1123.4	0.02	99.35
134.0-135.0	3.0	0.2	1123.7	0.02	99.37
135.0-136.0	3.1	0.2	1123.9	0.02	99.39
136.0-137.0	3.1	0.2	1124.2	0.02	99.42
137.0-138.0	3.2	0.2	1124.4	0.02	99.44
138.0-139.0	3.3	0.2	1124.6	0.02	99.46
139.0-140.0	3.3	0.2	1124.9	0.02	99.48
140.0-141.0	3.4	0.2	1125.1	0.02	99.50
141.0-142.0	3.4	0.2	1125.3	0.02	99.52
142.0-143.0	3.5	0.2	1125.6	0.02	99.54
143.0-144.0	3.5	0.2	1125.8	0.02	99.56

C Plane (°): 0.0-360.0: 30.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature: 25  
 Operator: Jacky

Gamma Plane (°): 0.0-180.0: 1.0  
 Test Device: GPM-1800B  
 Distance: 9.028 m  
 Humidity: 60%  
 Inspector:

## Zonal Lumen (Continue 4)

Gamma [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
144.0-145.0	3.6	0.2	1126.0	0.02	99.58
145.0-146.0	3.7	0.2	1126.3	0.02	99.60
146.0-147.0	3.7	0.2	1126.5	0.02	99.62
147.0-148.0	3.7	0.2	1126.7	0.02	99.64
148.0-149.0	3.8	0.2	1126.9	0.02	99.66
149.0-150.0	3.9	0.2	1127.1	0.02	99.68
150.0-151.0	3.9	0.2	1127.3	0.02	99.70
151.0-152.0	4.0	0.2	1127.6	0.02	99.72
152.0-153.0	4.0	0.2	1127.8	0.02	99.73
153.0-154.0	4.0	0.2	1128.0	0.02	99.75
154.0-155.0	4.1	0.2	1128.1	0.02	99.77
155.0-156.0	4.1	0.2	1128.3	0.02	99.79
156.0-157.0	4.2	0.2	1128.5	0.02	99.80
157.0-158.0	4.2	0.2	1128.7	0.02	99.82
158.0-159.0	4.3	0.2	1128.9	0.02	99.83
159.0-160.0	4.3	0.2	1129.0	0.01	99.85
160.0-161.0	4.3	0.2	1129.2	0.01	99.86
161.0-162.0	4.4	0.2	1129.3	0.01	99.87
162.0-163.0	4.4	0.1	1129.5	0.01	99.89
163.0-164.0	4.4	0.1	1129.6	0.01	99.90
164.0-165.0	4.5	0.1	1129.8	0.01	99.91
165.0-166.0	4.5	0.1	1129.9	0.01	99.92
166.0-167.0	4.6	0.1	1130.0	0.01	99.93
167.0-168.0	4.6	0.1	1130.1	0.01	99.94
168.0-169.0	4.7	0.1	1130.2	0.01	99.95
169.0-170.0	4.7	0.1	1130.3	0.01	99.96
170.0-171.0	4.7	0.1	1130.4	0.01	99.97
171.0-172.0	4.8	0.1	1130.5	0.01	99.97
172.0-173.0	4.8	0.1	1130.5	0.01	99.98
173.0-174.0	4.8	0.1	1130.6	0.01	99.99
174.0-175.0	4.9	0.1	1130.6	0.00	99.99
175.0-176.0	4.9	0.0	1130.7	0.00	99.99
176.0-177.0	4.9	0.0	1130.7	0.00	100.00
177.0-178.0	4.9	0.0	1130.7	0.00	100.00
178.0-179.0	4.9	0.0	1130.8	0.00	100.00
179.0-180.0	5.0	0.0	1130.8	0.00	100.00

C Plane (°): 0.0-360.0: 30.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature: 25  
 Operator: Jacky

Gamma Plane (°): 0.0-180.0: 1.0  
 Test Device: GPM-1800B  
 Distance: 9.028 m  
 Humidity: 60%  
 Inspector: